



“Kilimanjaro and Safari”

Tanzania, Africa

~ The Highest Peak on the Continent ~ Wildlife Viewing ~ Luxury Lodging ~
~ Exotic Cuisine ~ National Parks ~ and Much More...



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Itinerary Snapshot

Kilimanjaro: *The Modified Shira Route*

East African Safari: *Tarangire National Park & Ngorongoro Crater*

- Day 1** Upon your arrival, you transfer to Arusha for dinner and overnight at Arusha Serena Hotel. (D)
- Day 2** A day to recover from your long flight. You can relax at the Arusha Serena Hotel or do some souvenir shopping in town. (B,D)
- Day 3** Day 1 of trekking – the gate to Shire 1 Camp: We drive to the town of Londorossi where the porters are waiting. We then enter the gates of Kilimanjaro National Park and begin hiking through the lush rainforest. 4-5 hours hiking. (B,L,D)
- Day 4** Day 2 of trekking – Shira 1 Camp to Shira Camp: The day's trek begins with a steep hike out of camp through a new type of vegetation and volcanic rock. 5-6 hours hiking. (B,L,D)
- Day 5** Day 3 of trekking – Shira Camp to Barranco Camp: We ascend out of Shira Camp and Kili will be right in front of us throughout the hike. 6-7 hours hiking. (B,L,D)
- Day 6** Day 4 of trekking – Barranco Camp to Karanga Camp: Wake up to hot tea and breakfast and immediately make our assault on the steep Barranco Wall, fondly called "The Breakfast Climb". 4-6 hours hiking. (B,L,D)
- Day 7** Day 5 of trekking: Karanga Camp to Barafu Camp: After climbing out of the Karanga Valley, the trail ascends a ridge to the Barafu Camp, our highest camp yet, at 15500 feet. 3-4 hours hiking. (B,L,D)
- Day 8** Day 6 of trekking: Barafu Camp to summit and back down to Mweka Camp: Rise and shine at 11:30 pm! We begin climbing by starlight, the porters always reminding us to go "polee-polee" (slowly, slowly!), until we reach Uhuru Peak, (Freedom Peak) at 5895 meters / 19,340 feet, the highest point on the continent of Africa. 11-15 hours hiking. (B,L,D)
- Day 9** Day 7 of trekking: Miliieum Camp to Mweka Village: Now we hike down the Mweka Trail through the rainforest and arrive in the village of Mweka where there are plenty of wood curios, batiks, T-shirts, and souvenirs for sale. 4-5 hours hiking. Overnight in Arusha. (B,L,D)
- Day 10** After breakfast, we leave for Tarangire National Park – a famous park for its high concentration of elephant herds and tree climbing pythons. Overnight at Tarangire Safari Lodge. (B,L,D)
- Day 11** A day to explore Tarangire National Park. Overnight at Tarangire Safari Lodge. (B,L,D).
- Day 12** After breakfast, we leave for Ngorongoro Crater passing Lake Manyara on the way. Have your camera ready for fantastic panoramic views across the volcano-studded floor of the Great Rift Valley. Overnight at Serena Ngorongoro Lodge. (B,L,D)
- Day 13** Descend into the Ngorongoro Crater and enjoy a full day game drive. Overnight Serena Ngorongoro Lodge. (B,L,D)
- Day 14** After breakfast we start our drive back to Arusha, stopping to take photos of Massai villages and a visit to the Reptile Farm. We arrive in time for you to wash up before your flight back home or to Zanzibar. (B,L,D)

(B=Breakfast, L= Lunch, D = Dinner / Beverages are not included with meals at the hotels.)

Trip Summary

Mt. Kilimanjaro The Roof of Africa at 19,340 feet / 5895 meters!

Climbing Kilimanjaro is a reasonable goal for an active person who has always dreamed of reaching the highest point on the African continent. We invite you to come to Africa with us and realize your dream!

We at Bio Bio Expeditions have been leading expeditions in Africa for more than 16 years. We have established an alliance with our Tanzanian guides who run our base of operations in Arusha. Our guides are extremely experienced and are delightful human beings. They know every step of the way and will give you the confidence and pace needed to maximize both your enjoyment and effort. We have been chosen by the Wilderness Medicine Society to outfit all of their trips on Kilimanjaro. Our itinerary has been planned with the help of some of the most well know doctors in the field of high altitude medicine. Dr. Howard Donner and Dr. Gene Allred have consulted with us in creating the safest itinerary possible.

After careful consideration of the pros and cons of each route up the mountain, we have decided on a rather unique approach, which offers several distinct advantages and is definitely the most beautiful route. The **Modified Shira Route** effectively combines the best of the Shira Route with the most scenic section of the Machame route. This route starts at the Londorossi gate on the northwest edge of the Mt. Kilimanjaro National Park.

The more common route up the mountain, the Marangu-Coca Cola route, only encompasses one section of the mountain and has become quite crowded. The Modified Shira Route may be a little more strenuous and longer than some of the other routes, but the extra hard work will pay off with better acclimatization and less crowded camps. The shorter, "easier" routes have a much lower success rate than our 7 day climb. We have designed our itinerary to include 4 nights above 12,000 feet with two relatively short hiking days in between thus allowing your body to rest and adjust to the altitude.

We carry oxygen, a Gamow bag, a pulse oximeter and satellite phones on all trips. Sometimes it's the small things that help make your trip more comfortable. We bring our own toilet system on the mountain, use a roomy mountain hardware space station for your dining tent, and our chairs all have backs on them, which are a welcome treat after long days on the trail!

We will enjoy the beautiful and extraordinarily diverse vegetation that enhances the scenery along this route as we traverse around the mountain, viewing it from many different angles. We would especially like to note that our route allows us to focus not just on the summit, but the journey itself. The Bio Bio Expeditions approach to the Kilimanjaro trek is just as much about getting to know the mountain's many sides and moods as getting to the top. Everyone will reach a summit - whether it is Uhuru Peak, one's own personal highest point, or just the satisfaction of spending 7 days on one of the most spectacular mountains of the world.

The safari includes the best parks of East Africa with very tasteful, high-end Safari lodges. With highly qualified guides and only 4 people to a Land Rover, you will be sure to see an abundance of wildlife, in style and comfort.

Come and join us for an unforgettable adventure in Africa...

Detailed Itinerary

Day One

Arrive at Kilimanjaro International Airport (JRO), purchase your tourist visa (\$100 cash) and go through customs before collecting your luggage. You will be met at the arrival hall by a Bio Bio Expeditions staffer who will escort you to the **Arusha Serena Hotel**. You will love this start to your stay in Africa! (1,500 meters / 4,920 feet.)

Day Two

Many people wisely choose to take the opportunity to rest from the long journey as well as mentally and physically prepare for your Kilimanjaro ascent. However, you do have the choice of visiting the town of Arusha, which is culturally interesting and offers great shopping opportunities. Or, you may choose to do an introductory game drive to the nearby Arusha National Park. (This game drive is not included in your trip price.) If you opt for the game drive, you will be picked up in a comfortable safari vehicle and drive one hour to the Arusha National Park. This is a beautiful, lush, relatively small park at the base of Mt. Meru with incredible views of Kilimanjaro. You will enjoy the forested foothills and the open, grassy calderas, which offer perfect viewing of cape buffalo and other herd animals, such as elephant, zebra, giraffe, impala, sable, waterbuck, bushbuck, and warthog. The forest is also a favorite habitat of blue monkeys, baboons, and Colobus monkeys. Return to Arusha Serena Hotel. Elevation - 1,500 meters / 4,920 feet.

Day Three

Today we begin our climb! Day packs and poles ready!

Day 1 of trekking – the gate to Shira 1 Camp: After a hearty breakfast, we drive approximately 2 hours up to the town of Londerossi where we check into Kilimanjaro National Park. It's a short drive on a steep track through farmland and plantations up to Morum Gate. We climb steadily through shrub forest and stands of giant heather to reach the rim of Shira Plateau (3,350 meters / 10,990 feet). The views across the surrounding plains open up as we climb to our first camp in the center of the Shira Plateau. Shira 1 Camp has great views and fewer crowds than the first night of the other routes. The porters will greet us at camp with tea and cookies, tents will be set up and we'll celebrate our first night on the flanks of Mt. Kilimanjaro. We carry our own bathroom tent, which is much nicer than the public facilities on the mountain. Breakfasts and dinners are served in our roomy dining tent (Mountain Hardware Space Station) and our dining chairs all have back support to provide the most comfort possible. Our porters will also provide hot water in washbasins so you can freshen up before meals and at bedtime! (Camp at 3,610 meters / 11,843 feet) 4-5 hours of hiking.

Day Four

Day 2 of trekking – Shira 1 Camp to Shira Camp: This is a gradual day to help acclimatization and to explore the grassy moorland and the volcanic rock formations of the plateau. Make way for the porters and they pass by with our camp in pieces on their backs. After you arrive at Shira Camp, there's an option to take a short walk to see the caves that used to serve as shelter for porters. The sun will soon set behind the rugged mountain ridge of the Shira Plateau casting a purple hue over the valley. (Camp at 3,840 meters / 12,598 feet.) 5-6 hours hiking.

Day Five

Day 3 of trekking – Shira Camp to Barranco Camp: We ascend out of Shira Camp at a nice slow pace, as this is the highest we've been yet. Kibo is in front of us throughout the hike. After a lunch stop, we detour up a steep slope to the impressive Lava Tower, a tall, black volcanic mass of rock. Some choose to scramble to the top, being rewarded with beautiful views. Or, you may opt to rest and relax! On the steep hillside above us we can see the Western Breach trail which goes directly to the Kibo Glacier. After admiring the Lava Tower, we descend down to a cold glacial stream, refill our water bottles and continue on and around the mountain. At this point, we continue to circumnavigate Kilimanjaro and view this beautiful mountain from many different angles. After hiking across a sparse lava field, we descend to the beautiful Barranco Camp. There is another cold stream flowing through this scenic valley with the impressive Barranco Wall on the opposite side. (Camp at 3,950 meters / 12,959 feet.) 6-8 hours hiking.

Day Six

Day 4 of trekking – Barranco Camp to Karanga Camp: Wake up to hot tea and breakfast and immediately make our assault on the steep Barranco Wall, fondly called "the Breakfast Climb" as it is our first challenge of the day. We will see Kibo from a new angle and have a nice, fairly short walk through high desert terrain and over several ridges to the Karanga River Valley Camp. We camp beneath the icefalls of the Heim, Kersten and Decken Glaciers. This is a "short" day of hiking so one may choose to do a hike up to the scree field and then "ski" back down or just rest in camp with a good book. (Camp at 4,200 meters / 13,780 feet.) 4-6 hours hiking.

Day Seven

Day 5 of trekking: Karanga Camp to Barafu Camp: After climbing out of the Karanga Valley, the trail ascends a ridge to the Barafu Camp, our highest camp yet, at 15,980 feet. From this dry camp (there are no nearby streams) we will be making our ascent to the top. We plan to arrive early in order to adequately rest before our 11:30 pm wake-up call. (Camp at 4,600 meters / 15,091 feet.) 3-4 hours hiking.

Day Eight

3,360 feet up, 6000 feet down...3.12 miles up, 7.5 miles down!

Day 6 of trekking: Barafu Camp to summit and back down to Millennium Camp: Rise and shine at 11:30 pm! Dressed in our warmest gear and with plenty of water (4 liters each), snacks, and headlamps we meet in the dining tent for some tea and cookies. We begin climbing by starlight using our headlamps, the local guides always reminding us to go "*polee-polee*" (slowly-slowly). This portion of the climb is, as you might imagine, the most demanding. This is the marathon day! The steepest section arrives just before Stella Point. We ascend to the rim of the Kibo Crater between the Rebmann and Ratzel Glaciers. The last section before the rim can sometimes be snow-covered and ski poles or a walking stick is useful for balance. From here another hour leads to *Uhuru Peak*, (Freedom Peak) at 5,895 meters / 19,340 feet, the highest point on the continent of Africa. After

watching the sunrise and snapping plenty of photos, we descend back down to the Barafu Hut for a rest and lunch. We then continue down the Mweka trail (used for descent only) through the giant heather zone to arrive near sunset at the Millenium Camp. (Camp at 13,000 feet.) 11-15 hours hiking.

Day Nine

Day 7 of trekking: Millenium Camp to Mweka Village: Four to five hour hike down the Mweka trail through the rainforest. Arrive in the village of Mweka where there are plenty of wood curios, batiks, T-shirts, and souvenirs for sale. We have a delicious hot lunch in the village then get on the bus for an hour-long drive back to the Arusha Serena Hotel, which will be a welcome, clean sanctuary. After showers and rest, a delightful feast awaits us as we celebrate our accomplishment!

Day Ten

We are picked up in comfortable safari Landcruisers with removable roofs and drive west two hours to Tarangire National Park. This park draws large herds from across the Maasai during the dry season as thousands of animals migrate from the dry Maasai steppe to the Tarangire River in search of water. Lions and other predators follow the herds and can be found throughout the park. The park is approximately 2600 sq km.

We have lunch at the entrance to the park and then have an afternoon game drive, ending up at the southeastern edge of the park. We check into the beautifully laid out **Tarangire Safari Lodge**.

Day Eleven

We have full day to explore Tarangire National Park with a dawn game drive and a mid-day siesta. We then go for an afternoon game walk to a rock outcropping overlooking the valley and enjoy a fireball African sunset. We return to the lodge to have dinner and then you may opt for a night drive to study the nocturnal and diurnal creatures. Again, overnight at **Tarangire Safari Lodge**.

Day Twelve

After breakfast we leave Tarangire for Lake Manyara (95kms). Here, there are panoramic views across the volcano-studded floor of the Great Rift Valley. We stop along the way to visit Massai villages and overnight at the Serena Ngorongoro Lodge.

Day Thirteen

After an early morning breakfast, we descend into the crater for a full day game drive. Overnight at Crater Serena Lodge.

A few words about Ngorongoro crater...

Often described as one of the wonders of the world, it was declared a WORLD HERITAGE SITE in 1978. The worlds largest intact volcanic caldera, it is a natural sanctuary for some of Africa's densest animal populations. Grasslands, swamps, lakes, rivers, mountains and wildlife are all there. The approach road winds up and up through the densely forested outer slopes to Heroes Point where there is a spectacular viewpoint over the 260 square km crater floor lying 600 m below. The Gol Mountains are at the far rim, Lake Magadi in the centre with Seneto

springs to the left. Gorigor swamp lies to the right and Lerai Forest in the foreground. Access to the crater is strictly monitored, with only three roads (two of them, one-way,) to the crater floor. The authorities rigidly forbid tourists from entering the crater before 07.00 and they must leave before 18.00. It is estimated that there are up to 25,000 large mammals in the 100 square miles of the crater floor so you always see many animals on a game drive. They are mainly grazers but carnivores include a population of about 100 lions and approx. 400 hyenas. Open grassland covers most of the crater floor and this supports large concentrations of wildebeest and zebra. Buffalo, Thompson's and Grant's gazelle, eland, hartebeest and warthog are also common. There are no giraffe, Topi or impala in the crater. Elephant are mainly found in the swamp and there is a population of about 25 black rhino. Hippos are mainly found at Ngoitokitok Springs. There are many birds including flamingo on Lake Magadi.

Day Fourteen

Drive back to Arusha. Stop along the way to visit the Reptile Farm. Arrive in Arusha in time to wash up and catch your International flight home or transfer to the island of Zanzibar.

Packing List

Packing for Kilimanjaro is not an easy task. All types of weather will be encountered and a wide range of temperatures. For example, temperatures at the base of the mountain in the towns of Moshi or Arusha may be as warm as **85°F / 30°C** degrees and temperatures on the summit may be as low as **14°F / -10°C!** Also, it is not uncommon to see afternoon rains and even snow!

You should dress with the layering system in mind. We suggest polypropylene underwear and then adding other synthetic layers in the cool parts of the day. No cotton! Having warm / rain gear in your daypack is essential.

Luggage to bring: You should bring a soft duffel bag, one other piece of luggage and a daypack. The soft duffel will be taken on the climb and carried by the porters. No wheels, internal frames, etc will make it easier for the porters to lash multiple bags together. The other bag with your safari gear will be left in Arusha at the hotel. When you return from the climb you can switch out bags/gear. After the climb, the Moivaro can do laundry for a fee and should be able to get it back to you by the next morning.

While hiking **your porter will only be carrying 39 pounds of gear not including the tent.** Keep this in mind when deciding what to bring and make sure you are able to carry any weight above 39 pounds. 18KG

We provide 4 season expedition tents but there is the option to bring your own tent if you would like. Please let us know if you would like to do this, so we can make arrangements.

SAFARI CLOTHES

- **Pants**- 2 pair light colored
- **Long sleeve shirts** - 2 light or tan colored. You want to stay covered up as much as possible to protect against mosquitoes.
- 1 **sweater/fleece** for early morning and late afternoon game drives

- **Walking shoes** - comfortable
- **Swimming suit** - some of the lodges have pools
- **Hat**- wide brimmed for sun protection
- **Binoculars and wildlife guides**
- **Pants and button down shirt or dress/skirt** for dinner.
- **Camera with zoom lens** - Guests have been very happy with a 300-millimeter lens! *Lots of film or a large memory card(s) and extra batteries.

CLIMBING / TREKKING

- 6 pair of **warm socks**. - Wool or synthetic. Having a fresh pair of socks for each day is always a nice luxury
- 1 pair of **hiking shorts**
- 3 or 4 **t-shirts** - REI makes a very nice synthetic t-shirt
- **Underwear** - REI also sells men's and women's briefs that have no cotton in them. They are all synthetic material which dries quickly, wicks moisture away from your body and, if it does get wet, will continue to keep you warm
- 1 pair of **long underwear**
- 1 pair of **wind proof and waterproof pants**
- 1 pair of **fleece pants**
- 2 **long sleeve polypropylene shirts**
- 1 warm **fleece sweater**
- 1 **down jacket or vest**
- 1 **waterproof shell** with a hood to protect yourself from the wind and or rain. Gortex is a breathable good option!
- 1 pair of **warm gloves or mittens**. Down mittens with fleece liners are recommended.
- 1 **headlamp** - Important for the summit night of hiking. We suggest the new LED lamps, either Petzl or Black Diamond and ***extra batteries**.
- **Trekking poles** are a must - We do have a supply of older ski type poles in Africa but you may prefer your own.
- 1 pair of **gators** - On both the first and last day of the trek we sometime encounter deep mud! Also some people like gators for keeping the rocks out of their shoes
- **Hiking Boots** - Please bring boots adequate for the below freezing temperatures, possible rain and high winds we may encounter on our summit day. Ideally, this means well-insulated and warm hiking boots that are waterproof (thus providing good wind protection as well). Please be sure you have ample room for thick socks and the possibility of your feet swelling up a little at high altitudes. Constriction is the biggest culprit of a cold foot-- either by way of too tight fitting of a boot or too many sock/ foot warmers in your boot. "Medium weight" hiking boots may suffice as long as you have plenty of wiggle room for very warm socks and foot warmer packs. Please test out your boots before the trip to be sure they will be adequate for summit day. Boots with good ankle support is very important.
- **Sun hat and warm hat** for cold days.
- **Sunscreen or zinc**.
- 1 pair of **sunglasses**
- **Gatorade, rehydration salts, your own supply of energy bars/gel**
- **Purell, handy wipes**
- **Ear Plugs** - for camping / sleeping :)
- **Face mask, goggles, bandana, or dust mask**. A **balaclava** can be useful for warmth on summit day.

- **Water bottles** and a CamelBak. You should have a **4-liter capacity!** A CamelBak is great for the trip except on summit day. Even if your bladder and hose are insulated, there's a chance that the water inside the hose can freeze. Please have additional water bottles. Also, you can fill your water bottles with hot water at night and use them as a bed warmer.
- **2 insulated water bottle carriers** (to prevent your water from freezing on summit day.) that can hook onto your belt or daypack waist strap. You will not want to take off your pack to get a drink of water on summit day. Outdoor Research makes one that works well and is sold at REI.
- **Cough Drops, Kleenex, Mole skin (for blisters)**
- **Altimeter watches** are always fun to have but not a necessity! (Make sure if you buy one that records heights up to 20,000 feet. Some only go to 14,000 feet)
- **Short wave radios** work on the mountain if listening to Voice of America or the BBC world report is interesting to you
- **1 paperback book** - There is plenty of time to read and relax so bring along a good book! And don't forget your journal and pens!
- **Sleeping bag** - Most people prefer a 0 degree bag.
- **Sleeping pad** - Very important for insulation!
- **Toe warmers, Foot-powder**
- **Daypack** with approximately 2400 cubic inches of storage for all the gear you want accessible during the day including water, rain gear, warm clothes, snacks, sunscreen, camera, etc.
- **Duct tape**
- **3 Heavy duty trash bags** to protect your gear from possible rain
- **Passport** (it's a good idea to have a photocopy of your passport and airline tickets kept in a separate area than the originals)
- **Proof of yellow fever vaccination card**
- **H2O iodine tablets** or water filter (optional)

You do not have to apply for a visa ahead of time for Tanzania. You can get your visa at your point of entry. The cost is U.S. \$100.00 (cash).

Entry requirements: A passport (valid for 6 months upon arrival and with one empty page for visa and entry stamp), return ticket, and adequate funds. Americans are required to pay visa fees at point of entry.

Yellow fever vaccinations are required for all travelers from yellow fever endemic countries/regions. All individuals in transit for twelve (12) hours or more, and/or who leave the immediate airport vicinity, in a yellow fever endemic area are required to show proof of vaccination upon arrival in any port of debarkation in Tanzania. However, direct arrivals from non-endemic countries in Europe and North America are not required to show the certificate. We recommend you have yellow fever immunization and carry your WHO immunization card with you in case you have emergency travel to a country that requires proof of immunization, such as South Africa.

Please note: it is your responsibility to check with embassies to verify any passport and visa requirements for entry and exit requirements for the countries you will be visiting.

Money

While the Tanzanian Shilling is the local currency, you can buy almost everything with dollars. Some hotels even prefer it. You can exchange a bit of US cash to buy supplies and goodies at the local grocery store and for souvenirs from street vendors. Traveler's checks are no longer an efficient way

to change money. Exchange rates are high and places to do this are limited. Also, using credit cards or ATMs is not always possible though there are a couple ATMs in Arusha. With this mind, it is nice to carry a fair amount of cash hidden in different areas. Small, crisp, clean bills are useful because many people can't change the larger bills. We suggest approximately \$1000 dollars in cash, a credit card, and your ATM card. You should have \$100 of this in new \$1 bills. You will use these bills to tip bellboys at hotels, taxi drivers and the like. The rest should be \$5s, \$10s and \$20s.

Tips

Tipping is always optional and, of course, is up to you to decide the final amounts. Our suggestion is that you tip 10-15% of your trip's land costs. For example, if your trip is around \$5000, you should have at least \$500 cash for tips. Because the Kilimanjaro portion of your trip is more arduous and uses more staff, a larger percentage of this \$500 (perhaps \$350 to \$400) will go to the fine people who help you summit. Because our guides and porters are so outstanding and take such amazing care of everyone, past participants have wanted to tip more than usual. (Just something to keep in mind.) You can give the total tip to your trip leader and he/she will divide it evenly between the porters, guides and cooks. This process will be done once at the end of the climb and again at the end of the safari.

Again, you should be carrying small bills for tips. \$20 bills are easy for the trip leader to divvy up between all staff. But you will find that a stack of \$5s and \$10s will come in handy.

THE TOTAL: While it seems like a lot, having a total of around \$1000 cash per person is best. **PLEASE HAVE A MONEY BELT YOU WEAR UNDER YOUR CLOTHES.** Also, keep in mind that more than half of this sum will be gone at the end of the climb.

Porters Exchange – Bio Bio Expeditions is in the process of setting up a non-profit side of the business which will help ensure that all porters on Kilimanjaro have proper equipment and clothing to protect them from the elements on the mountain. We are requesting that you bring any extra warm clothes or shoes which you are willing to gift to the mountain porters on Kilimanjaro. Please contact Bio Bio Expeditions for more information on the Porters Exchange!

Immunizations

Bio Bio Expeditions suggests you check with your family doctor at least 2 months before your trip to find out the latest requirements for shots when traveling to Africa. Recent information on required vaccinations can be obtained by calling the Centers for Disease Control international travelers hotline at 877.394.8747. You can access their website by directing your browser to <http://www.cdc.gov/>. You should particularly look into the following vaccinations.

- Hepatitis A or Immune Globulin (IG).
- Typhoid
- Yellow fever
- As needed, booster doses for tetanus-diphtheria, measles, and a one-time dose of polio vaccine for adults.

Malaria

Transmission and Symptoms:

Malaria is a serious disease that is transmitted to humans by the bite of an infected female Anopheles mosquito. Symptoms may include fever and flu-like illness, including: chills, headache, muscle aches, and fatigue. Malaria may cause anemia and jaundice. Malaria, if not promptly treated, may cause kidney failure, coma, and death. Malaria can often be prevented by using anti-malarial drugs and by using personal protection measures to prevent mosquito bites. However, in spite of all protective measures, travelers may still develop malaria. Travelers who become ill with a fever or flu-like illness while traveling in a malaria risk area and up to one year after returning home should seek prompt medical attention and should tell the physician their travel history.

Prevention:

- Malrone is the drug of choice for Malaria prevention as it has fewer reported side effects than other drugs and, according to various studies, is more effective.

Preventing Insect Bites:

In addition to using drugs to prevent malaria, travelers should protect themselves from mosquito bites by wearing clothing that covers most of the body, using bed nets, and applying insect repellent to exposed skin, particularly between dusk and dawn. The most effective repellents contain the active ingredient DEET (N, N-diethyl meta-toluamide). When using DEET, follow these precautions:

- Always use according to label directions.
- Use repellent only when outdoors and wash skin after coming indoors.
- Do not breathe or swallow repellent or get it in the eyes.
- Do not put repellent on wounds or broken skin.
- Adults should use DEET at a concentration of 30% to 35%.
- DEET should not come in contact with rubber elements for they will melt.

For greater protection, clothing can be soaked in or sprayed with permethrin. Permethrin will repel insects for several months. Repellents containing DEET, and Permethrin can be purchased in hardware, camping, and military surplus stores.

Water

Although it takes a little extra caution when drinking fluids in Africa, it is essential to stay well hydrated. We advise that you not drink any of the tap water in most of Africa. Bottled water is fine to drink and can be ordered at most restaurants. When ordering sodas, it is best to request them without ice as the ice can be made from tap water. On the trek, porters will gather water en route and boil it for our consumption. For an extra precaution, you can choose to bring a personal water pump or iodine so you may never have to worry about not having enough water.

Food

Avoid rich food until you acclimatize. If you are wary of getting sick, then play it safe and eat only cooked foods or fresh fruit that you have peeled yourself. The best hotels and restaurants have high standards for hygiene and food preparation. In general, stay cautious, eat what appeals to you and trust your senses.

Diarrhea

Traveling to Africa is going to be a big change on your body. Despite the many precautions we all take to stay healthy, occasionally one may experience diarrhea. The major problem associated with diarrhea is fluid loss leading to severe dehydration, so it is important to maintain plentiful fluid intake. Avoid caffeine and alcohol because they further dehydrate you. The best drinks are weak tea, mineral water, and caffeine-free soft drinks. Although ideally it is best to let diarrhea run its course, on a trekking trip this is uncomfortable. You may want to bring an over-the-counter diarrhea cure to minimize your discomfort or talk to your doctor about prescribing an antibiotic for traveler's diarrhea such as Cipro. We also advise that you carry your own supply of toilet paper, as some of the restrooms in Africa may not have TP.

Prescriptions

If you take prescription medications that you need to bring, be sure to have a plentiful supply and the doctor's prescription in case something happens to them. Along those lines, it is best to carry medications in your carry-on bag in case of lost luggage. If you wear prescription glasses or contacts, we advise that you bring a spare set.

Voltage

Electrical current in Africa is 220 volts AC. Weights and measures are Metric.

Thievery

Although the locals are a warm, friendly, fun-loving people, poverty and therefore thievery, is a problem. Always keep your wits about you and be aware of your surroundings. When with other people, watch out for each other. Large crowds are prime locations for pick-pocketing to occur. Keep your money in a money belt or hidden pouch that you wear around your neck and under your shirt. When purchasing items, do not pull out lots of money. We advise that you leave all valuable jewelry, including fancy watches, at home. Thieves often work in pairs or groups - one tries to distract you (i.e.: by squirting food or paint on your clothing) and in your ensuing confusion, another one makes off with your belongings.

Fitness Levels

Your upcoming expedition is potentially quite strenuous. Although there will be lots of "downtime" to relax, read, and rest, we will be doing some very physical activities as well. Although we will maintain a slow, easy pace on the climb that will fit with almost anyone, it is nonetheless a strenuous high altitude hike. We recommend that you begin a fitness routine, especially one that includes regular hiking, as soon as you can, to be in top shape. You will enjoy the hike much more if you are in shape and feeling strong. Please read carefully our high altitude training document included in this packet.

Altitude Sickness

We all enjoy that tremendous view from a high summit, but there are risks in going to high altitude and it's important to understand these risks.

What is High Altitude?

Altitude is defined on the following scale High (8,000 - 12,000 feet [2,438 - 3,658 meters]), Very High (12,000 - 18,000 feet [3,658 - 5,487 meters]), and Extremely High (18,000+ feet [5,500+ meters]). Since few people have been to such altitudes, it is hard to know who may be affected. There are no specific factors such as age, sex, or physical condition that correlate with susceptibility to altitude sickness. Some people get it and some people don't, and some people are more susceptible than others. Most people can go up to 8,000 feet (2,438 meters) with minimal effect. If you haven't been to high altitude before, it's important to be cautious. If you have been at that altitude before with no problem, you can probably return to that altitude without problems as long as you are properly acclimatized. What causes altitude illnesses?

The concentration of oxygen at sea level is about 21% and the barometric pressure averages 760 mmHg. As altitude increases, the concentration remains the same but the number of oxygen molecules per breath is reduced. At 12,000 feet (3,658 meters) the barometric pressure is only 483 mmHg, so there are roughly 40% fewer oxygen molecules per breath. In order to properly oxygenate the body, your breathing rate (even while at rest) has to increase. This extra ventilation increases the oxygen content in the blood, but not to sea level concentrations. Since the amount of oxygen required for activity is the same, the body must adjust to having less oxygen. In addition, for reasons not entirely understood, high altitude and lower air pressure causes fluid to leak from the capillaries, which can cause fluid build-up in both the lungs and the brain. Continuing to higher altitudes without proper acclimatization can lead to potentially serious, even life-threatening illnesses.

Acclimatization

The major cause of altitude illnesses is going too high too fast. Given time, your body can adapt to the decrease in oxygen molecules at a specific altitude. This process is known as acclimatization and generally takes 1-3 days at that altitude. For example, if you hike to 10,000 feet (3,048 meters), and spend several days at that altitude, your body acclimatizes to 10,000 feet (3,048 meters). If you climb to 12,000 feet (3,658 meters), your body has to acclimatize once again. A number of changes take place in the body to allow it to operate with decreased oxygen.

- The depth of respiration increases.
- Pressure in pulmonary arteries is increased, "forcing" blood into portions of the lung, which are normally not used during sea level breathing.
- The body produces more red blood cells to carry oxygen,
- The body produces more of a particular enzyme that facilitates the release of oxygen from hemoglobin to the body tissues.

Prevention of altitude illnesses falls into two categories: proper acclimatization and preventive medications. We have chosen a route up the mountain that maximizes acclimatization. There are a few ways you can help your body adjust to altitude:

- Stay properly hydrated. Acclimatization is often accompanied by fluid loss, so you need to drink lots of fluids to remain properly hydrated. Urine output should be copious and clear.
- Avoid tobacco, alcohol and other depressant drugs including: barbiturates, tranquilizers, and sleeping pills. These depressants further decrease the respiratory drive during sleep resulting in a worsening of the symptoms.
- Eat a high carbohydrate diet (more than 70% of your calories from carbohydrates) while at altitude.

Preventive Medications

Diamox (Acetazolamide) allows you to breathe faster so that you metabolize more oxygen, thereby minimizing the symptoms caused by poor oxygenation. This is especially helpful at night when respiratory drive is decreased. Since it takes a while for Diamox to have an effect, it is advisable to start taking it 24 hours before you go to altitude and continue for at least five days at higher altitude. The recommendation of the Himalayan Rescue Association Medical Clinic is 125 mg. twice a day (morning and night). Possible side effects include tingling of the lips and fingertips, blurring of vision, and alteration of taste which subside when the drug is stopped. Contact your physician for a prescription. Since Diamox is a sulfonamide drug, people who are allergic to sulfa drugs should not take Diamox. Diamox has also been known to cause severe allergic reactions to people with no previous history of Diamox or sulfa allergies. Frank Hubbell of SOLO recommends a trial course of the drug before going to a remote location where a severe allergic reaction could prove difficult to treat.

Acute Mountain Sickness (AMS)

AMS is common at high altitudes. At elevations over 10,000 feet (3,048 meters), 75% of people will have mild symptoms. The occurrence of AMS is dependent upon the elevation, the rate of ascent, and individual susceptibility. Many people will experience mild AMS during the acclimatization process. Symptoms usually start 12-24 hours after arrival at altitude and begin to decrease in severity about the third day. The symptoms of Mild AMS are headache, dizziness, fatigue, shortness of breath, loss of appetite, nausea, disturbed sleep, and a general feeling of malaise. Symptoms tend to be worse at night and when respiratory drive is decreased. Mild AMS does not interfere with normal activity and symptoms generally subside within 2-4 days as the body acclimatizes. As long as symptoms are mild, and only a nuisance, ascent can continue at a moderate rate. When hiking, it is essential that you communicate any symptoms of illness immediately to your trip leader. Basic treatment of the symptoms of mild AMS include pain medications for headache and Diamox (see above).

MODERATE AMS

Moderate AMS includes severe headache that is not relieved by medication, nausea and vomiting, increasing weakness and fatigue, shortness of breath, and decreased coordination (ataxia). Normal activity is difficult, although the person may still be able to walk on their own. At this stage, only advanced medications or descent can reverse the problem. Descending even a few hundred feet may help, and definite improvement will be seen in descents of 1,000-2,000 feet (305-610 meters). Twenty-four hours at the lower altitude will result in significant improvements. The person should remain at lower altitude until symptoms have subsided (up to 3 days). The best test for moderate AMS is to have the person "walk a straight line" heel to toe. Just like a sobriety test, a person with ataxia will be unable to walk a straight line. This is a clear indication that immediate descent is required. It is important that the people descend before the ataxia reaches the point where they cannot walk on their own, which would necessitate an evacuation.

SEVERE AMS

Severe AMS presents as an increase in the severity of the aforementioned symptoms, including shortness of breath at rest, inability to walk, decreasing mental status, and fluid buildup in the lungs. Severe AMS requires immediate descent to lower altitudes (2,000 - 4,000 feet [610-1,220 meters]).

There are two other severe forms of altitude illness, High Altitude Cerebral Edema (HACE) and High Altitude Pulmonary Edema (HAPE). Both of these happen less frequently, especially to those who are properly acclimatized. When they do occur, it is usually with people going too high too fast or going very high and staying there. The lack of oxygen results in leakage of fluid through the capillary walls into either the lungs or the brain. High Altitude Pulmonary Edema (HAPE) results from fluid buildup in the lungs. The fluid in the lungs prevents effective oxygen exchange. As the condition becomes more severe, the level of oxygen in the bloodstream decreases, and this can lead to cyanosis, impaired cerebral function, and death. Symptoms include shortness of breath even at rest, "tightness in the chest," marked fatigue, a feeling of impending suffocation at night, weakness, and a persistent productive cough bringing up white, watery, or frothy fluid. Confusion, and irrational behavior are signs that insufficient oxygen is reaching the brain. In cases of HAPE, immediate descent is a necessary life-saving measure (2,000 - 4,000 feet [610-1,220 meters]). Anyone suffering from HAPE must be evacuated to a medical facility for proper follow-up treatment.

High Altitude Cerebral Edema (HACE) is the result of swelling of brain tissue from fluid leakage. Symptoms can include headache, loss of coordination (ataxia), weakness, and decreasing levels of consciousness including, disorientation, loss of memory, hallucinations, psychotic behavior, and coma. It generally occurs after a week or more at high altitude. Severe instances can lead to death if not treated quickly. Immediate descent is a necessary life-saving measure (2,000 - 4,000 feet [610-1,220 meters]). Anyone suffering from HACE must be evacuated to a medical facility for proper follow-up treatment.

Tanzania Facts

Situated in East Africa, just south of the equator, mainland Tanzania lies between the area of the great lakes; Victoria, Tanganyika and Malawi - with the Indian Ocean to the east. It has land borders with Uganda and Kenya to the north, Mozambique and Malawi to the south, Zambia to the southwest and Zaire, Burundi and Rwanda to the west.

The country lies at an altitude of over 1,000ft, apart from a coastal strip varying in width from 10 to 40 miles. The greater part of the country is made up of plateau averaging 3,000 to 4,500ft in height. Mountains are grouped in various sections with the Pare and Usambara ranges to the northeast and the Livingstone Mountains in the southwest. Kilimanjaro (19,340ft), in the north, is the highest mountain in Africa.

On the borders are three large lakes; Victoria, the second-largest freshwater lake in the world, Tanganyika, second only to Lake Baikal as the deepest in the world; and Lake Malawi. Even though three great African rivers, the Nile, the Zaire and the Zambezi, have their origins in Tanzania, the country has few permanent rivers. During half the year, the central plateau has no running water, but in the rainy season flooding presents a problem.

Full country name: United Republic of Tanzania

Area: 945,090 sq km (364,879 sq mi)

Population: 31,270,820, 33 per sq. km, 56% growth

Life Expectancy: 45 **Infant Mortality:** 85 per thousands

Doctors per person: 4 **Illiteracy:** 26.4%

Currency: Tanzania Shilling (TSh)

Capital city: Dodoma (in transition from Dar es Salaam)

People: 99% native African (over 100 tribes), 1% Asian, European and Arabic

Languages: Swahili, English, indigenous.
Religion: 40% Christian, 33% Muslim, 20% indigenous beliefs
Government: Republic (multi-party state)
President: Benjamin William Mkapa
Colonized by: British **Independence:** 1961
GDP: US\$7 billion
GDP per head: US\$220
Inflation: 40%
Major industries: Tobacco, sugar, sisal, diamond & gold mining, oil refining, cement, tourism.
Major trading partners: India, Germany, Japan, Malaysia, Rwanda, the Netherlands, South Africa, Kenya, U.K., Saudi Arabia, China
Time: GMT+3 **Dial Code:** 255
Geography and Climate
Coastline: 1,424km **Geo Coordinates:** 35 00E, 6 00S
Health Risks: Malaria exists all year throughout the country below 1800 meters, Rabies.
Rivers: Rufiji, Pangani, Ruvu Lakes: Lake Victoria
Highest Pts: Mt. Kilimanjaro
Climate: Varies from Tropical along coast to Temperate in highlands.
Rain Season: October - November and April - May

Kilimanjaro Facts

Kilimanjaro is the highest mountain in Africa whose formation started 750,000 years ago. In 1973 the mountain was reclassified a national park, having been declared a Game Reserve in the 1910s by the German colonial government and then a Forest Reserve in 1921. Mount Kilimanjaro is the crown of Tanzania. Rising abruptly from the open planes, capped by snow and frequently fringed by clouds, it is one of Africa's classic images. The diameter of its base is 40 miles. Kilimanjaro is a dormant, but not extinct volcano. Ominous rumbles can some times be heard and gases emerge from the fume holes in the crater. Although just 3 degree's south of the Equator, the peaks of both Kibo and Mawenzi have permanent caps of snow and ice. During their time on the mountain, climbers pass from a tropical to arctic environment in just a few days. The various trails first pass through lush rain forest before reaching heather and open moorland where giant lobelia and huge, cactus-like groundsel grow. Above this moorland is the almost lunar landscape of an alpine desert, which stretches between the two peaks of Kibo, the flat-topped dome at the centre and Mawenzi, a group of jagged points and pinnacles on the eastern side. Inhospitable as this 'moonscape' may seem, animals such as herds of elands thrive there.

Kilimanjaro History

Mount Kilimanjaro lies on the border of Tanzania and Kenya, just south of the Equator. To the west lies the Great African Rift Valley, created by tremendous tectonic forces that also gave birth to a string of other volcanoes. One of these, Mount Kenya, was originally much higher than Kilimanjaro. The three summits of Mount Kilimanjaro, Shira, Kibo and Mawenzi are all of very recent origin. Shira and Mawenzi both have suffered considerable erosion and only jagged peaks remain. Kibo, the central, youngest and highest peak has survived as an almost perfect cone.

Although East Africa and nearby Olduvai Gorge is thought to be the cradle of mankind it is unlikely that early man would have been attracted to the steep and cold slopes of Kilimanjaro at a time when it was probably very active and dangerous. A Wachagga legend talks of Mawenzi receiving fire for its pipe from his younger brother Kibo. The Wachagga who live on the fertile volcanic soils around the

base of the mountain probably only came to the area about 300 years ago thus this legend suggests very recent activity. Another of their legends talks of demons and evil spirits living on the mountain and guarding immense treasures. Stories are told of a king who decided to go to the top; few of his party survived and those who did had damaged arms and legs.

Arab and Chinese traders and historians make mention of a giant mountain lying inland from Mombasa or Zanzibar but few early traders ventured into the interior of the continent. Slave traders passed below it and sometimes raided the villages of the Wachagga but it was not until the middle of the 19th century that a more serious interest was taken in the mountain and attempts were made to scale it. In 1848 Johann Rebmann, a missionary from Germany, saw Mount Kilimanjaro while crossing the plains of Tsavo. His guide talked of "baridi" - cold, and of tales how a group of porters were sent up the mountain to bring back the silver or other treasures from the summit. They came back only with water. Rebmann's report stimulated great interest in Germany and in the following years several expeditions were organized, first by Baron von Decken then later by Dr. Hans Meyer who finally stood on the highest point on the 5th of October 1889. Mount Kilimanjaro now attracts many thousands of walkers each year. On the 1st of January 2000 over 1000 people reached the summit to see the sun rise over a new Millennium.

Online Information

Below we have compiled a list of web sites that will help you find answers to all of those uncommon questions!

Money

www.xe.net/ucc/ - This is a universal currency converter site
www.oanda.com/ - Exchange rates and currency forecasts
www.visa.com/atmlocator/index.jsp - A list of ATM machines world wide

Clothing / Gear

www.patagonia.com - Expedition clothing.
www.rei.com - Expedition gear and clothing.
www.mountainhardwear.com - Tents, sleeping bags, expeditions wear.
www.exofficio.com - Lightweight travel clothes - Great for Safaris!
www.eaglecreek.com - Excellent travel gear and packing tips from the experts
www.cameraworld.com - The best prices on camera and video gear!
www.nrsweb.com - Anything you could ever want for the river.
www.ilbean.com - Gear and clothing for any adventure.

Health

wwwnc.cdc.gov/travel - All the latest recommendations on vaccination and important information on health concerns worldwide.

Passport and Embassy Information

www.travel.state.gov/content/travel/english.html - How to get a passport fast! - List of Embassies worldwide.

Weather

www.accuweather.com - Find out the weather anywhere in the world!

Travel Warnings

travel.state.gov/content/passports/english/alertswarnings.html - State department warnings for overseas travelers.

Conservation

www.friendsoftheriver.org - Help save rivers worldwide

www.awf.org -Help protect Africa's most precious resources, the National Parks!

www.sierraclub.org - Protecting the environment for our families and our futures

www.edf.org - Stay current on all environmental issues - Environmental Defense Fund

www.tnc.org - The Nature Conservancy - Saving the last great rivers

www.irn.org - International Rivers Network - Supports local communities working to protect their rivers and watersheds. They work to halt destructive river development projects, and to encourage equitable and sustainable methods of meeting needs for water and flood management.

Map of Tanzania



Pre-Departure Checklist

- Please keep this sheet handy and check off each item when completed.
- Passport and valuable documents. Money and credit cards. Make sure you know your pin code before leaving the country. (Keep these close to your body in a well concealed place)
- Make photocopies of plane tickets, credit cards, and passport.
- Make sure you carry-on essentials that you cannot live without. Don't check them through!
- Medications and prescriptions (Keep in your carry-on)
- Eyeglasses or contacts and prescriptions (Keep in your carry-on)
- Reading material for plane and relaxing in Africa.
- Reconfirm flights (72 hours in advance)
- Make sure you have a ride to the airport.
- Leave Bio Bio Expeditions contact phone numbers with a responsible person.
- Find someone to water your plants, feed your dog, and pet your cat.
- Do not forget to tell work you will be gone a few days!
- Travelex travel insurance * forms filled out and sent in. (*Highly suggested.*)
- Spending money for trip to cover meals, taxis, tips, gifts, and any incidentals not covered by Bio Bio. Please check itinerary to see where meals are not covered.

(Please get to the airport at least 3 hours before any International flight!)

We look forward to seeing you in Africa!